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EXAMINER

ABELSON, RONALD B

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 11/03/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/484,426

Applicant(s)

FORSLOW, JAN E.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20,23-43,45-59,61,62 and 64-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 58,59,61,62 and 64-73 is/are allowed.
- 6) ☐ Claim(s) 1-19,23-39,41-43,45-53,56,57,74 and 75 is/are rejected.
- 7) ☒ Claim(s) 20,40,54 and 55 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☒ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8. 6) ☐ Other:

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***Allowable Subject Matter***

1. The indicated allowability of claims 1-19, 23-39, 41-43, 45-53, 56, 57, 74 and 75 is withdrawn in view of the newly discovered reference(s) to Agraharam, Ma, Montenegro, Turunen, La Porta, Nystrom, Merrill, and Chiu. Rejections based on the newly cited reference(s) follow.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "~~home~~ agent router" in line

7. There is insufficient antecedent basis for this limitation in the claim.

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***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 6-15, 17-19, 35-38, 41, 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Agraharam (US 6,407,988).

Regarding claims 1, 12, 13, 15, 35, 37, 38, Agraharam teaches a method and apparatus for an Internet (fig. 1 box 110), a public mobile access data network (MAIN, col. 2 lines 34-37) providing a mobile node (mobile hosts, col. 3 line 62) data access to the mobile node from the Internet when a point of attachment of the mobile node to the public node access data network changes (col. 2 lines 42-47).

The system comprises a home agent mobility manager node coupled to a backbone of the Internet (fig. 1 box 105.1, 106.1).

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The system comprises plural foreign agents (fig. 8 box 111.3-111.5) coupled to the home agent router (fig. 8 box 111.2).

The system establishes data tunnels between one of the home agent mobility tunnel servers and one of the foreign agents to communicate data with one of the mobile nodes (fig. 2 tunnel 220, col. 5 lines 39-40).

Regarding claims 12, 35, and 19, 42, in addition to the limitations previously listed, the home agent router and one of the foreign agents are co-located (fig. 1, col. 3 lines 32-34).

Regarding claims 13, 15, 37, 38, in addition to the limitations previously listed, plural home agent routers (figs. 5-8) configured as a virtual home agent network (col. 4 lines 33-34) for one of the mobile nodes (figs. 5-8, box 100.1).

Regarding claims 15 and 38, in addition to the limitations previously listed, any one of the home agents in the virtual home network may forward data to and from the mobile node (col. 2 lines 42-47, col. 1 line 60 - col. 2 line 3).

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Regarding claim 37, in addition to the limitations previously listed, one of the foreign agents sending registration messages to all home agents in the virtual home network (fig. 6 box 104.3, 104.1, 104.2, col. 7 lines 26-29).

Regarding claim 2, the network locates current locations of mobile nodes so that the Internet is aware of the current point of attachment of the mobile node (col. 6 lines 47-48).

Regarding claim 6, the public mobile access data network is operated by an ISP (home premises network, col. 2 lines 34-37).

Regarding claim 7, the public mobile access data network provides data communication between a corresponding node via the Internet (fig. 1 box 110).

Regarding claim 8, the system comprises a home agent router coupled to a backbone of the Internet (fig. 1 box 105.1, 106.1), the system comprises plural foreign agents (fig. 8 box 111.3-111.5) communicating with one or more mobile nodes (fig. 8 box 100.1, 100.2), the system establishes data tunnels between one of the home agent router and one of the foreign agents to

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communicate data with one of the mobile nodes (fig. 2 tunnel 220, col. 5 lines 39-40).

Regarding claim 9, the home agent router is located at a point of presence near the Internet backbone (fig. 1 box 104.1, 104.2).

Regarding claim 10, one of the foreign agent routers is located at a point of presence near a radio access point where the mobile node attaches to the public mobile access data network (fig. 1 box 104.1, 104.2).

Regarding claim 11, the mobile node de-attaches from the public mobile access data network at one of the foreign agents and re-attaches at another (col. 7 lines 9-11). Note, the reference explicitly shows the mobile attaching to the foreign agent.

Regarding claims 14 and 36, given the home agent and foreign agent are co-located, it is inherent that reciprocal control signaling between the two is reduced.

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Regarding claims 17 and 41, one of the home agents closest to a corresponding node sending data to the mobile node is selected to forward data (col. 5 lines 63-67).

Regarding claim 18, the closest home agent has a smallest routing metric (route optimization is assured, col. 8 lines 50-52).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agraharam (US 6,407,988) in view of Ma (US 6,493,317).

Regarding claims 23 and 27, Agraharam teaches a method and apparatus for an Internet (fig. 1 box 110), a public mobile access data network (MAIN, col. 2 lines 34-37) providing a



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mobile node (mobile hosts, col. 3 line 62) data access to the mobile node from the Internet when a point of attachment of the mobile node to the public node access data network changes (col. 2 lines 42-47).

The system comprises a home agent mobility manager node coupled to a backbone of the Internet (fig. 1 box 105.1, 106.1).

The system comprises plural foreign agents (fig. 8 box 111.3-111.5) coupled to the home agent router (fig. 8 box 111.2).

Although Agraharam teaches tunneling between the home agent and foreign agent (fig. 2) and the mobile moving from one foreign agent to another (col. 5 lines 1-3, col. 7 lines 9-11), the reference is silent the on MPLS, as specified in claims 23; the data tunnel is dynamically established using one or more variable service parameters, as specified in claim 27; and one of the service parameters may be QoS, as specified in claim 28.

Ma teaches MPLS in a public mobile access data network (fig. 1, col. 5 line 51), as specified in claims 23; and the data tunnel is dynamically established using one or more variable service parameters (MPLS, col. 5 line 51), as specified in claim 27; and one of the service parameters may be QoS, as specified in claim 28. Regarding claims 27 and 28, it is well known in the art that MPLS supports QoS (see applicant's spec).

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Therefore it would have been obvious to one of ordinary skill in the art, having both Agraharam and Ma before him/her and with the teachings [a] as shown by Agraharam, a method and apparatus for configuring a public mobile access data network to provide public data access between an Internet and a mobile node which is attachable to various points of the public mobile access data network, and [b] as shown by Ma, tunneling via MPLS, to be motivated to modify the system of Agraharam by tunneling using the MPLS protocol. Given MPLS provides for QoS, this would improve the system by providing a method for the public mobile access data network to process traffic selectively according to class.

Regarding claim 24, one or more tunnels are established between ones of the plural home agent routers and ones of the plural foreign agent routers so a mobile node communicating over one of the tunnels associated with the first agent continues that communication over another of the tunnels associated with a second foreign agent (Agraharam: fig. 8 box 104.3, 104.4, 104.5, col. 9 lines 23-62).

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Regarding claim 25, the tunnels are relatively static (Agraharam: fig. 8 see tunnels between home agents and foreign agents: for example 810 and 830 are "relatively static").

Regarding claim 26, a care-of address is changed (fig. 8, col. 9 lines 49-54).

8. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agraharam (US 6,407,988) in view of Montenegro (US 6,571,289).

Regarding claim 29, Agraharam teaches a method and apparatus for configuring a public mobile access data network to provide public data access between an Internet and a mobile node (MAIN, col. 2 lines 34-37) which is attachable to various points of the public mobile access data network (fig. 8).

The system comprises a home agent mobility manager node coupled to a backbone of the Internet (fig. 1 box 105.1, 106.1).

The system comprises plural foreign agents (fig. 8 box 111.3-111.5) coupled to the home agent router (fig. 8 box 111.2).

The system comprises assigning the mobile node a home address (col. 1 lines 53-54), one of the foreign agents

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assigning the mobile node a care-of address (col. 5 lines 1-3), and the home agent associates the home address and the care-of address (col. 6 lines 2-3, col. 9 lines 49-52).

Although Agraharam teaches assigning the mobile node a home address, the reference is silent on the home agent assigning the mobile node a home address.

Montenegro teaches the home agent assigning the mobile node a home address (col. 6 lines 59-61).

Therefore it would have been obvious to one of ordinary skill in the art, having both Agraharam and Montenegro before him/her and with the teachings [a] as shown by Agraharam, a method and apparatus for configuring a public mobile access data network to provide public data access between an Internet and a mobile node which is attachable to various points of the public mobile access data network, and [b] as shown by Montenegro, the home agent assigning the mobile node a home address, to be motivated to modify the system of Agraharam by having the home agent address assign the mobile node a home address. This modification can be performed in software. This would improve the system by providing a method of assigning the mobile a home address and having the home agent aware of the assignment.

Regarding claim 30, the network locates current locations of mobile nodes so that the Internet is aware of the current point of attachment of the mobile node (col. 6 lines 47-48).

9. Claims 74 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma (US 6,493,317) in view of applicant's admitted prior art 'AAPA'.

Ma teaches a method and apparatus for providing a public mobile access data network providing a mobile node data access to the Internet and data access to the mobile node from the Internet (fig. 1) containing a first routing node (fig. 1 box 8, fig. 2).

The first node comprises a control entity for establishing a data tunnel across the public mobile access data network between the routing node and a second routing node (fig. 1 box 20), and a forwarding entity for processing and routing packets over the tunnel (MPLS, col. 5 line 51). The home agent establishes a data tunnel and forwards the packets according to the MPLS protocol.

Although Ma teaches QoS (col. 8 lines 42-43), the reference is silent on the control entity configuring the tunnel using one or more service parameters.

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AAPA teaches the control entity configuring the tunnel using one or more service parameters (FEC, pg. 6 lines 13-23) and a forwarding entity for processing and routing packets over the tunnel (pg. 6 lines 13-23).

Therefore it would have been obvious to one of ordinary skill in the art, having both Ma and AAPA before him/her and with the teachings [a] as shown by Ma, for providing a public mobile access data network providing a mobile node data access to the Internet and data access to the mobile node from the Internet containing a first routing node, and [b] as shown by AAPA, the control entity configuring the tunnel using one or more service parameters, to be motivated to modify the system of Ma by processing data according to the FEC algorithm. The modification can be performed in software. This would improve the system by providing a method for the public mobile access data network to process traffic selectively according to class.

Regarding claim 75, variable service parameters include one of the following: QoS, bandwidth (Ma: col. 8 lines 42-43).

10. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agraharam (US 6,407,988) as applied to claim 1 above, and further in view of Turunen (US 6,484,211).

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Agraharam is silent on the public mobility service is provided independently of the services offered by the radio access specific network, as specified in claim 3; and the radio access specific network includes GSM/GPRS, as specified in claim 4.

Turunen teaches public mobility service is provided independently of a GSM network (fig. 2, col. 2 lines 11-19).

Therefore it would have been obvious to one of ordinary skill in the art, having both Agraharam and Turunen before him/her and with the teachings [a] as shown by Agraharam, a method and apparatus for an Internet, a public mobile access data network providing a mobile node data access to the mobile node from the Internet when a point of attachment of the mobile node to the public node access data network changes, and [b] as shown by Turunen, public mobility service is provided independently of a GSM network, to be motivated to modify the system of Agraharam by incorporating the network within a GSM network. This modification can be performed by following protocols RFC2002 (col. 2 lines 11-14). This would improve the system by allowing GSM users access to the network.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agraharam (US 6,407,988) as applied to claim 1

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above, and further in view of La Porta (US 6,496,505) and Nystrom (US 6,526,091).

Agraharam is silent on a public mobility service is provided independently of a TDMA network.

La Porta teaches a public mobility service is provided independently of a TDMA network (fig. 19, col. 3 lines 63-65, col. 30 lines 63-66).

Therefore it would have been obvious to one of ordinary skill in the art, having both Agraharam and La Porta before him/her and with the teachings [a] as shown by Agraharam, a method and apparatus for an Internet, a public mobile access data network providing a mobile node data access to the mobile node from the Internet when a point of attachment of the mobile node to the public node access data network changes, and [b] as shown by La Porta, a public mobility service is provided independently of a TDMA network, to be motivated to modify the system of Agraharam by incorporating the network within a TDMA network. This modification can be performed by following TDMA standards. This would improve the system by making the network accessible to TDMA users.

Although the combination of Agraharam and La Porta teaches a public mobility service is provided independently of a TDMA network, the combination is silent on D-AMPS.



The combination of Agraharam and La Porta is silent on D-AMPS.

Nystrom teaches D-AMPS is a digital standard using TDMA.

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Agraharam and La Porta and Nystrom before him/her and with the teachings [a] as shown by the combination of Agraharam and La Porta , a method and apparatus for an Internet, a public mobile access data network providing a mobile node data access to the mobile node from the Internet when a point of attachment of the mobile node to the public node access data network changes, and a public mobility service is provided independently of a TDMA network, and [b] as shown by Nystrom, D-AMPS is a digital standard using TDMA, to be motivated to modify the system of Agraharam by incorporating it within a D-AMPS environment. This can be accomplished by following the standards published in the TIA/EIA/IS-136 (Nystrom: col. 2 lines 15-21). This would improve the system by allowing it to be incorporated in a digital environment.

12. Claims 16 and 39 rejected under 35 U.S.C. 103(a) as being unpatentable over Agraharam (US 6,407,988) as applied to claims 15 and 38 above, and further in view of Merrill (US 6,618,353).

Although Agraharam teaches DHCP, the reference is silent on one if one of the home agents is dysfunctional, another of the home agents forwards data to and from the mobile.

Merrill teaches packet rerouting according to DHCP.

Therefore it would have been obvious to one of ordinary skill in the art, having both Agraharam and Merrill before him/her and with the teachings [a] as shown by Agraharam, a method and apparatus for an Internet, a public mobile access data network providing a mobile node data access to the mobile node from the Internet when a point of attachment of the mobile node to the public node access data network changes, and [b] as shown by Merrill, packet rerouting according to DHCP, to be motivated to modify the system of Agraharam by rerouting packets according to the DHCP protocol. This would improve the system by providing a means for the packets to be rerouted in the event one of the agents is not operational.

13. Claims 51, 53, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Agraharam (US 6,407,988) and Ma (US 6,493,317) as applied to claim 50 and 47, above, and further in view of Chiu (US 6,385,170).

The combination of Agraharam and Ma is silent on optimization on any criteria other than the shortest route.

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Chiu teaches optimization based upon resource balancing (col. 3 lines 3-8) in an MPLS environment (col. 2 lines 21-22). Note, the examiner corresponds the load balancing of the applicant with the resource balancing of Chiu (claim 53). In addition, the examiner corresponds the "use and performance of the data tunnel" of the applicant with the resource balancing of Chiu (claim 57).

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Agraharam and Ma and Chiu before him/her and with the teachings [a] as shown by the combination of Agraharam and Ma, a method and apparatus for an Internet, a public mobile access data network providing a mobile node data access to the mobile node from the Internet when a point of attachment of the mobile node to the public node access data network changes, and [b] as shown by Chiu, optimization based upon resource balancing in an MPLS environment, to be motivated to modify the system of the combination of Agraharam and Ma to incorporate a resource balancing algorithm in the route selection process. This modification can be performed in software. This would improve the system by ensuring that the system's limited resources are allocated efficiently.

14. Claims 43, 45 - 50, 52, and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agraharam (US 6,407,988) and Montenegro as applied to claims 32 and 29, above, and further in view of Ma (US 6,493,317).

Regarding claim 45, the home agent establishing tunnel with the foreign agent using the care-of address (Agraharam: fig. 2 tunnel 220, col. 5 lines 1-3).

Regarding claim 47, the home agent and foreign agent are routers (Agraharam: fig. 2).

Although Agraharam teaches tunneling between the home agent and foreign agent (fig. 2) and the mobile moving from one foreign agent to another (col. 5 lines 1-3, col. 7 lines 9-11), the reference is silent the on MPLS, as specified in claims 43, and 47; the home agent establishing a tunnel with the foreign agent using the care-of address using one or more desired tunnel attributes, as specified in claim 45.

Ma teaches MPLS in a public mobile access data network (fig. 1, col. 5 line 51), as specified in claims 43 and 47. Regarding claims 45, and 46, it is well known in the art that MPLS supports QoS (see applicant's spec). Regarding claim 48, the label switched routers encapsulate incoming data packets with a label, remove a label from outgoing data packets, and

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route data packets by swapping labels, this is standard procedure in MPLS.

Therefore it would have been obvious to one of ordinary skill in the art, having both Agraharam and Ma before him/her and with the teachings [a] as shown by Agraharam, a method and apparatus for configuring a public mobile access data network to provide public data access between an Internet and a mobile node which is attachable to various points of the public mobile access data network, and [b] as shown by Ma, tunneling via MPLS, to be motivated to modify the system of Agraharam by tunneling using the MPLS protocol. Given MPLS provides for QoS, this would improve the system by providing a method for the public mobile access data network to process traffic selectively according to class.

Regarding claim 49, merging label switched paths from plural regional foreign agents toward the home agent (Agraharam: fig. 8 box 104.3, 104.4, 104.5, 104.2). See paths from multiple foreign agents coming to one home agent.

Regarding claim 50, aggregating label switched paths at the home agent for plural regional foreign agents (Agraharam: fig. 8

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box 104.3, 104.4, 104.5, 104.2). See paths from one home agent to multiple foreign agents.

Regarding claim 52, a primary and secondary path corresponding to the tunnel (Agraharam: fig. 8). Note multiple paths exist between the nodes.

Regarding claim 56, forwarding a mobile node registration to plural home agent routing nodes (Agraharam: col. 7 lines 23-29). Although Agraharam specifically teaches path 100.1, 120.8 111.3, 111.1, it is obvious from the diagram path 100.1, 120.8 111.3, 111.2, 111.1 is also possible. Note, both nodes 111.1 and 111.2 contain home agents.

15. Claims 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Agraharam (US 6,407,988) and Montenegro (US 6,571,289) as applied to claim 29 and 30 above, and further in view of Turunen (US 6,484,211).

Agraharam is silent on the public mobility service is provided independently of the services offered by the radio access specific network, as specified in claim 31.

Turunen teaches public mobility service is provided independently of a GSM network (fig. 2, col. 2 lines 11-19).

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Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Agraharam and Montenegro and Turunen before him/her and with the teachings [a] as shown by Agraharam, a method and apparatus for an Internet, a public mobile access data network providing a mobile node data access to the mobile node from the Internet when a point of attachment of the mobile node to the public node access data network changes, and [b] as shown by Turunen, public mobility service is provided independently of a GSM network, to be motivated to modify the system of Agraharam by incorporating the network within a GSM network. This modification can be performed by following protocols RFC2002 (col. 2 lines 11-14). This would improve the system by allowing GSM users access to the network.

Regarding claim 32, establishing a data tunnel between the home agent and one of the foreign agents (Agraharam: fig. 2 tunnel 220).

Regarding claim 33, the home agent router is located at a point of presence near the Internet backbone (fig. 1 box 104.1, 104.2).

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Regarding claim 34, one of the foreign agent routers is located at a point of presence near a radio access point where the mobile node attaches to the public mobile access data network (fig. 1 box 104.1, 104.2).

***Allowable Subject Matter***

16. Claims 58, 59, 61, 62, and 64-73 allowed.

17. Claims 20, 40, 54, and 55, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 20 and 40, although Agraharam teaches advertisements (col. 6 line 66 - col. 7 line 15) and Shah teaches multi-exit discriminators, Shah does not teach using multi-exit discriminators to obtain an entry point to the network.

Regarding claim 54, nothing in the prior art of the record teaches or fairly suggests setting in one or more hosting foreign agents an address of the home agent, in combination with the other limitations listed in the claim.



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Regarding claim 55, nothing in the prior art of the record teaches or fairly suggests adding a set of mobile node IP addresses to the home agent, in combination with the other limitations listed in the claim.

Regarding claim 58, nothing in the prior art of the record teaches or fairly suggests a control entity for establishing a data tunnel across the public mobile access data network between the routing node and a second routing node, and a forwarding entity for processing and routing packets over the tunnel, none of the prior art of reference specifically teaches control entity includes a mobile internet protocol controller interfacing a multi-protocol label switching controller for setting up and controlling the label switched path.

#### ***Response to Arguments***

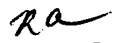
18. Applicant's arguments with respect to amended independent claims 1, 12, 13, 15, 23, 27, 29, 35, 37, 38, and 74 have been considered but are moot in view of the new ground(s) of rejection. The Examiner agrees with the Applicant that the amended independent claims are allowable over the prior art of the last office action. Therefore, another search was performed.

**Conclusion**

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

  
Ronald Abelson  
Examiner  
Art Unit 2666

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DANGTON  
PRIMARY EXAMINER